

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-5. (Canceled)

6. (Currently Amended) A probe that comes into electrical contact with an object to be inspected when inspecting an electrical characteristic of the object to be inspected, the probe comprising:

a probe main body having a contact portion that comes into contact with the object to be inspected; and

a plurality of conductive materials each having a tip portion projecting from the contact portion of said probe main body,

wherein the conductive materials are buried in the contact portion and made of a material harder than the contact portion, and

wherein the contact portion has a contact surface that comes into contact with the object to be inspected, the tip portions are formed to project from the contact surface, a projection length of the tip portions being larger than a thickness of an oxide film formed on a surface of an electrode of the object to be inspected, and the contact surface is formed substantially parallel to the surface of the electrode and comes into contact with the oxide film on the surface of the electrode to function as a stopper for the tip portions when the tip portions penetrate the oxide film to reach the electrode.

7. (Cancelled)

8. (Previously Presented) The probe according to claim 6, wherein said conductive materials are made of conductive diamond or nanoscale metal.

9. (Withdrawn) A method of manufacturing a probe that comes into electrical contact with an object to be inspected when inspecting an electrical characteristic of the object to be inspected, the method comprising the steps of:

forming, on a substrate, a mold of a contact portion that comes into contact with the object to be inspected;

putting in the mold a plurality of conductive materials having tip portions;

forming the contact portion by filling conductive metal in the mold;

forming a probe main body including the contact portion; and

releasing the contact portion from the mold and making the tip portions of the conductive materials project from the contact portion.

10. (Withdrawn) A method of manufacturing a probe that comes into electrical contact with an object to be inspected when inspecting an electrical characteristic of the object to be inspected, the method comprising the steps of:

forming, on a substrate, a mold of a contact portion that comes into contact with the object to be inspected;

putting in the mold a plurality of conductive materials having tip portions;

forming the contact portion by filling conductive metal in the mold;

forming a probe main body including the contact portion; and

releasing the contact portion from the mold and making the tip portions of the conductive materials project from the contact portion,

thereby forming the tip portions to project from a contact surface that comes into contact with the object to be inspected with a projection length being larger than a thickness of an oxide film formed on a surface of an electrode of the object to be inspected, and forming the contact surface substantially parallel to the surface of the electrode, so that the contact surface comes into contact with the surface of the electrode to function as a stopper for the tip portions when the tip portions penetrate the oxide film to reach the electrode.